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17
18 UNITED STATES DISTRICT COURT
19 FOR THE NORTHERN DISTRICT OF CALIFORNIA
20 OAKLAND DIVISION

21 MASTEROBJECTS, INC.,

22 Plaintiff,

23 v.

24 GOOGLE INC.,

25
26 Defendant.
27
28

Case No. 4:15-cv-01775-PJH

**PLAINTIFF MASTEROBJECTS, INC.'S
OPENING CLAIM CONSTRUCTION
BRIEF ON THE SINGLE ISSUE**

JURY TRIAL DEMANDED

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1 **I. Introduction**

2 Before the Court are 15 new asserted claims (1, 6-7, 15-16, 18-20, 25, 28, 32-33 and
3 35-37) from a new patent, presented here for the first time. In the Joint Case Management
4 Statement, the parties proposed an early *Markman* hearing for a central dispute: Google
5 contends that each new claim must be given the same claim construction earlier adopted for
6 markedly different claims from different patents that were the subject of a prior case.
7 Google's position should be rejected because it is contrary to the new claim language and the
8 law.

9 During the prior Google case and two other related cases against eBay and Yahoo!, it
10 became apparent that the defendants were attempting to limit the old claims in a certain way
11 (namely, transmission from the client to the server of "only the changes" as a search request
12 is typed by a user). In response, MasterObjects filed new claims in a pending patent
13 application with specific language to cover the embodiment that the defendants contended
14 (and this Court ultimately found) was not covered by the earlier claims. Unsurprisingly, in
15 drafting these new claims, MasterObjects omitted the language previously relied upon by the
16 Court and Google for the "only the changes" construction. Nevertheless, Google asks this
17 Court to apply a blanket limitation (that it calls a "construction") to every new claim, without
18 regard to the actual words therein. In doing so, Google ignores the differences between the
19 claims themselves, explicit claim language that cannot be reconciled with Google's proposed
20 limitation, and clear examples from the specification.

21
22 **II. MasterObjects Broke New Ground with its Search Technology**

23 MasterObjects, Inc. is a software company founded by Mark Smit, one of the
24 inventors of U.S. Patent No. 8,539,024 ("the '024 patent"), which is presently asserted. In
25 1999 and 2000, Mr. Smit was a young computer scientist working on relational databases and
26 complex document search and retrieval issues for a technology company near Amsterdam.
27 He found the technology frustrating and slow, and thought he could do better. Accordingly,
28

1 he left his job and put his life savings in a new company founded to develop better search
2 technology. He called the company MasterObjects.

3 By the summer of 2001, Mr. Smit had fully conceived of a new search paradigm. He
4 created a way to have instant search results provided as the user typed in characters in a
5 search request. Mr. Smit's technique uses asynchronous communications between the user's
6 computer and the server performing the search. In the old search model, the communication
7 was "synchronous," *i.e.*, the server would sit idle until the user hit submit, whereupon the
8 server would do its work, and then return the information to the client. As the client worked,
9 the server waited; as the server communicated, the client waited.

10 To break this "request-response" loop, Mr. Smit understood that he needed a new
11 way to communicate that was asynchronous, *i.e.*, the client and the server could talk to each
12 other within a session in a non-blocking way. In other words, the server and the client could
13 communicate at the same time rather than the server waiting until the client finished and vice
14 versa. It is the difference between a walkie-talkie ("roger, over") and a telephone (where the
15 parties can speak at any time, even simultaneously, within a conversation).

16 Mr. Smit also envisioned that the servers would store common prior search queries
17 and related results. Storing this information, along with the asynchronous communication,
18 allowed the system to quickly associate a few characters of a new request with a pre-existing
19 model of the same request and results thereto, and provide suggested results right away. For
20 example, as a user searching for information about an indoor arena in Manhattan types,
21 "mad" becomes "madi," then later "madison sq," and then out pops search results—the
22 content—for "madison square garden." As the user types in a query, the server provides
23 increasingly relevant and responsive information (*e.g.*, information relating to Mad
24 Magazine, then James Madison, then Madison Square Garden). These inventive techniques
25 provide useful search results much faster than prior systems.

26 Mr. Smit's invention was agnostic to the precise manner in which data was
27 transmitted between the client and server, and in particular, to the precise manner in which
28

1 data in the search query was transmitted from the client to the server. Nor was this ever a
 2 point of novelty or patentability. Instead, the invention provided a number of options,
 3 including the client sending the complete input containing all of the information that had
 4 been typed by the user at that time or only sending the changes to the input that had not
 5 previously been sent to the server. It simply does not matter how the search request
 6 information in the input is transmitted from the client to the server.

7 Along with others at MasterObjects, Mr. Smit developed a commercial embodiment
 8 of this invention called “QuestObjects,” which went on the market in 2004. In every version
 9 of the product shipped by MasterObjects, the client sends the complete input containing all of
 10 the information that has been typed by a user at the time, not just the changes to the earlier
 11 inputs. MasterObjects has had significant sales to clients including Hewlett-Packard,
 12 Siemens, and Princeton University. It remains in business today.

13 **III. The New '024 Patent Claims are Materially Different from the Prior Patent** 14 **Claims this Court Construed**

15 This is the second case between MasterObjects and Google.¹ MasterObjects filed its
 16 first lawsuit against Google on March 7, 2011. *See* 4:11-cv-01054-PJH (“*Google I*”). In the
 17 first case, the Court construed several terms in U.S. Patent Nos. 8,060,639 (the “’639 patent”)
 18 and 8,112,529 (the “’529 patent”).² The parties in *Google I* focused on claim 1 of the ’529
 19 Patent, and the Court held that a group of limitations known as the “‘additional characters’
 20 terms” required that “only the changes to the input string that were not sent in any previous
 21

22
 23
 24
 25 ¹ There was technically another case between MasterObjects and Google, 4:13-cv-04304-
 26 PJH, in which MasterObjects first asserted the ’024 patent. That case was voluntarily
 27 dismissed by MasterObjects without prejudice, *see* 04304, Dkt No. 20, prior to Google filing
 an answer or any claim construction occurring.

28 ² The ’024 patent, ’529 patent and ’639 patent are attached as Exhibits 1, 2, and 3,
 respectively, to the accompanying Declaration of Spencer Hosie.

consecutive query” were sent from the client to the server. *See Google I*, Dkt. No. 153 at 17.³ This Court was affirmed (without opinion) by the United States Court of Appeals for the Federal Circuit. *See Fed. Cir. Case No. 14-1148*, Dkt. No. 63.

Critically, the ’529 and ’639 claims previously construed by the Court and the ’024 claims at issue here differ in that **none of the words and phrases that this Court and Google previously relied upon when adopting the “only the changes” construction appears in the presently asserted claims.**

For example, in its *Markman* brief in the first case, Google emphasized that “[t]he key claim language is that the addition of characters from a plurality of queries together **form** an increasingly lengthening query string.” *Google I*, Dkt. No. 116 at 20 (emphasis in original). Google repeated this emphasis, arguing that “[u]nder MasterObjects’ theory, no **plurality of queries** would ever be combined to **form** an increasingly lengthening query string.” *Id.* at 21 (emphasis in original). But Google’s “key” claim language from ’529 and ’639 claims is nowhere to be found in the ’024 claims—there is no “form” or “together form” language, much less a “plurality of queries” that “form” or “together form” a lengthening query string.

Likewise, in holding that the ’529 and ’639 claims were limited to the “only the changes” construction, the Court in *Google I* focused on five concepts recited in the previously asserted claims, one of which used the “form” language:

First, the claim language itself suggests that the “lengthening string” is formed by piecing together multiple smaller queries, rather than by receiving iteratively longer versions of the string. Claim 1 of the ’529 patent describes how “**consecutive additional characters**” are input at the client and sent as “**consecutive queries**” to the server, “wherein each of the **corresponding consecutive queries lengthens the string** by the additional characters, to **form** a lengthening string.” The server then “receiv[es] each of the **corresponding consecutive queries that modify the lengthening string.**” The words “lengthens” and “modify” suggest that the server is

³ Page citations to documents with docket numbers refer to the original pagination of the document, and not the ECF banner pagination, where a document has both forms of pagination.

not wiping its slate clean with each new submitted query, but is instead combining the queries to form the “lengthening string.”

Google I, Dkt. No. 153 at 16-17 (emphasis added). None of these concepts is recited – in whole or in part – in the ’024 claims, which omit the following language that was at the heart of Google’s prior argument and the Court’s prior construction: (i) “form” and “to form”; (ii) “lengthens”; (iii) “modify”; (iv) “consecutive additional characters”; (v) “corresponding consecutive queries”; and (vi) “each of the corresponding consecutive queries”/“each [one] of the plurality of queries.” The Court also referenced the ’529 patent’s recitation of a “communication protocol.” *Id.* at 17. This language has also been removed from all asserted ’024 claims except for claims 32 and 33.⁴

In its ruling on MasterObjects’ Motion for Leave to File a Motion for Reconsideration of the prior claim construction order, the Court elaborated:

Claim 1 of the ’529 patent describes a process by which “**consecutive additional characters**” are input at the client computer, and “**corresponding consecutive queries**” are sent to the server. The natural reading of the claim is that the word “corresponding” means that the “consecutive queries” sent to the server correspond to the “consecutive additional characters” entered by the user. The claim goes on to state that “each of the corresponding consecutive queries **lengthens the string**,” and that the lengthening string is “**modified**” at the server.

Google I, Dkt. No. 173 at 4 (emphasis added). Again, all of these terms are omitted from the ’024 claims.

The absence of the ’529 and ’639 claim terms on which the Court and Google previously relied is apparent upon review of the old and new claims side-by-side (with an emphasis on the removed language):

Claim 1 of the ’529 Patent (Asserted in <i>Google I</i>)	Claim 1 of the ’024 Patent (Asserted in this Case)
A system for retrieval at a client system of content from a server system, comprising:	A system comprising: a server system, including one or

⁴ In *Google I*, the Court rejected Google’s proposed construction of “communication protocol” as used in the ’529 patent. *Id.* at 8-10.

<p>Claim 1 of the '529 Patent (Asserted in <i>Google I</i>)</p>	<p>Claim 1 of the '024 Patent (Asserted in this Case)</p>
<p>a communication protocol that enables an asynchronous connection over a network between a client system and a server system, and allows the client system to send via the network, and within a session between the client system and the server system, a lengthening string composed of a plurality of consecutively input characters, to query the server system for string-based content, while asynchronously receiving consecutive responses from the server system as the characters are being input;</p> <p>a content-based cache, at the server system, which stores previous queries and corresponding result sets previously executed by the system, and which includes within its result sets content or other information previously retrieved from the server system or one or more content sources in response to the previous queries;</p> <p>a client object, in communication with a client software at the client system and with the communication protocol, wherein the client object</p> <p>receives, as input, consecutive additional characters from the client software, and</p> <p>while <u>each of the consecutive additional characters</u> are being received as input, transmits via the network to a server object at the server system one or more <u>corresponding consecutive queries</u>, within the session between the client system and the server system, to retrieve content from the server system,</p> <p>wherein <u>each of the corresponding consecutive queries lengthens the string</u> by the additional characters, <u>to form a lengthening string</u> for retrieving matching content from the server system; and</p> <p>a server object, in communication with the server system, and with the client object via the communication protocol,</p>	<p>more computers, which is configured to receive query messages from a client object, the server system asynchronously receiving and responding to the query messages from the client object over a network;</p> <p>the client object that, while a user is providing input comprising a lengthening string of characters, sends query messages to the server system;</p> <p>whereby the query messages represent the lengthening string as additional characters are being input by the user; and</p> <p>wherein the server system, while receiving said query messages, uses the input to query data available to the server system and send return messages to the client object containing results in response to the input; and</p> <p>wherein, upon receiving a return message of the return messages from the server system, the client object tests the usability of the results in the return message by checking that the return message corresponds to the latest query, and if usability is established, the client object displays or returns at least some result data to the user.</p>

1	Claim 1 of the '529 Patent (Asserted in	Claim 1 of the '024 Patent (Asserted in
2	<i>Google I</i>)	this Case)
3	wherein the server object	
4	in response to receiving <u>each of the</u>	
5	<u>corresponding consecutive queries that</u>	
6	<u>modify the lengthening string,</u>	
7	automatically uses the lengthening	
8	string to query and retrieve content	
9	information from the content-based cache at	
10	the server system or from the one or more	
11	content sources that matches the lengthening	
12	string, and	
13	asynchronously returns, while the	
14	additional characters are being input and the	
15	<u>corresponding consecutive queries</u> are	
16	being transmitted and <u>the lengthening string</u>	
	<u>is being modified</u> during the session,	
	consecutive responses containing content	
	information which increasingly matches the	
	lengthening string, to the client object for	
	immediate use by the client system, wherein	
	the server system includes at least one	
	processor.	

17 Not only have the terms emphasized by Google and relied upon by the Court in *Google I*
18 been removed from the '024 claims, the concepts represented by those terms have been
19 eliminated as well.

20 Further, as Google repeatedly emphasized both before this Court and before the
21 Federal Circuit in *Google I*, its “only the changes” argument was not based on disavowal or
22 disclaimer, but instead was rooted in the specific language of the '529 and '639 claims and
23 its “plain and ordinary meaning.” Fed. Cir. Case No. 14-1148, Dkt. No. 40 at 3 (the “standard
24 [for disclaimer/disavowal] is inapposite here”); *see also id.* at 12-15 and 26 (“The claim
25 language itself dictates that the client may send the server only the changes to the previous
26 query.”). The Federal Circuit’s affirmance presumably endorsed Google’s plain and ordinary
27 meaning argument. Additionally, two other Northern District of California judges confirmed
28

(albeit for different terms) that there is no disclaimer/disavowal. *See* 3:12-cv-680, Dkt. No. 51 at 12-13; 3:11-cv-2539, Dkt. No. 64 at 7-8.

In sum, the '529 and '639 claim language previously construed by this Court is not present in the '024 claims, and as such, the present claim language must be independently construed.

IV. The '024 Patent Claims Specifically Cover Sending a Full String

As early as April 2012, defendants in the prior cases made clear that they would attempt to evade liability by arguing for a construction that focused on sending only “single characters” or sending “only the changes” to an input string. *See* Ex. 4 at 2, table, row 2, column 3 (Joint Claim Construction and Prehearing Statement, *MasterObjects v. Yahoo!*, 2539, Dkt. No. 36); Ex. 5 at 8 (Excerpts from Yahoo!’s Responsive Claim Construction Brief, *MasterObjects v. Yahoo!*, 2539, Dkt. No. 42). The point of novelty for MasterObjects’ invention, however, has nothing to do with *how* the queries are sent from the client; it is agnostic to the method of transmission.

Accordingly, MasterObjects drafted new claims that clearly cover sending a full string. In July 2012 – only two months after this issue was first raised by prior defendants – MasterObjects submitted a preliminary amendment in its pending continuation application, which ultimately issued as the '024 patent. *See generally* Ex. 6. In that preliminary amendment, MasterObjects presented for the first time the language that would eventually issue as the '024 claims (after a few tweaks). *Id.* Those claims avoid any language that might be interpreted as a requirement that “only the changes” to an input string be sent. Notably, during the prosecution of the underlying application, every relevant '529 and '639 claim term or clause relied upon by this Court in its prior construction was removed from the '024 claims, and new language was added in its place. For example, the new claims use the term “query messages,” **which are disclosed in the specification’s preferred embodiment as messages containing the full input string rather than only the changes to the previously sent input.** *See* '024 patent at 18:67-19:2 (where the input is “ab” and “a” was previously

1 sent to the server (*i.e.*, “b” is the change), “the Server Quester may deduct that the input
2 string represents a valid query and send the appropriate **query message ‘ab’** to the Service”) (emphasis added).

4 **V. Legal Standards for Claim Construction**

5 The scope of a patent is determined by its claims. 35 U.S.C. § 112(b); *Burke, Inc. v.*
6 *Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed. Cir. 1999). The Court construes
7 the scope and meaning of disputed claim terms as a matter of law. *Markman v. Westview*
8 *Instruments, Inc.*, 517 U.S. 370, 389–90 (1996). While claim construction is ultimately a
9 question of law, construction may present underlying questions of fact given disputes based
10 on extrinsic evidence. *See Teva Pharma. USA, Inc. v. Sandoz, Inc.*, —U.S.—, 135 S.Ct. 831,
11 841 (2015); *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1346 (Fed. Cir. 2015).

12 Although the specification, prosecution history, and extrinsic evidence are available
13 as tools for construing disputed claim terms, “the claim construction inquiry . . . begins and
14 ends in all cases with the actual words of the claim.” *Renishaw PLC v. Marposs Societa’ per*
15 *Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998) (citations omitted). Those words are generally
16 given their ordinary and customary meaning. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312
17 (Fed. Cir. 2005) (en banc). “There are only two exceptions to this general rule: 1) when a
18 patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee
19 disavows the full scope of a claim term either in the specification or during prosecution.”
20 *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). (Again,
21 Google has previously stated that disavowal is “inapposite.” *See supra* at 7.)

22 Courts must “avoid the danger of reading limitations from the specification into the
23 claim[.]” *Phillips*, 415 F.3d at 1323; *see also Kara Tech. Inc. v. Stamps.com, Inc.*, 582 F.3d
24 1341, 1348 (Fed. Cir. 2009) (“[W]e will not...import a limitation from the specification into
25 the claims.”). Additionally, patent claims are typically interpreted in a manner that would
26 cover at least one embodiment in the specification, although they need not be construed to
27 cover all specification embodiments. *Baran v. Medical Device Technologies, Inc., et al.*, 616
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1 F.3d 1309, 1312, 1316 (Fed. Cir. 2010). Indeed, “[i]t is often the case that different claims
 2 are directed to and cover different disclosed embodiments. The patentee chooses the
 3 language and accordingly the scope of his claims.” *Helmsderfer v. Bobrick Washroom*
 4 *Equip., Inc.*, 527 F.3d 1379, 1383 (Fed. Cir. 2008).

5 The Federal Circuit also permits the use of “extrinsic evidence” in certain contexts to
 6 educate the court about the field of the invention and the viewpoint of a person of ordinary
 7 skill in that field. Extrinsic evidence “consists of all evidence external to the patent and
 8 prosecution history, including expert and inventor testimony, dictionaries, and learned
 9 treatises.” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995), *aff’d*,
 10 517 U.S. 370 (1996).

11 **VI. The Proposed Constructions Before the Court**

12 MasterObjects proposes that this Court construe three claim terms: “input,” “query
 13 messages,” and “query/queries.” MasterObjects’ proposed constructions rest in the plain and
 14 ordinary meaning of the claim language and specifically address the central dispute between
 15 the parties, *i.e.*, whether the claims are limited to sending “only the changes.” MasterObjects’
 16 constructions show that there is no such limitation for the ’024 claims.

17 Google, for its part, refuses to offer constructions for these three terms. Why?
 18 Because Google knows that these terms have simple ordinary meanings that cannot be
 19 seriously disputed. Instead, Google asks the Court to construe extremely long phrases (one of
 20 which it crops to avoid problematic claim language) and states that constructions for
 21 MasterObjects’ terms are “subsumed within the constructions proposed for” their much
 22 longer terms. Google simply refuses to confront the plain language of the ’024 claims, and
 23 instead asks that this Court blindly follow its prior construction in *Google I* for very different
 24 patent claims. But Google must litigate the ’024 patent, not re-try the old patents.
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a. **MasterObjects’ Proposed Constructions are Consistent with the Plain and Ordinary Meaning of the Claim Terms and the Specification**

1. *“Input”*

Claims	Claim Term	MasterObjects’ Proposed Construction	Google’s Proposed Construction
’024: 1, 6, 7, 15, 16, 18, 19, 20, 25, 28, 32, 33, 35 & 37	“input” (noun)	A string of one or more characters provided by a user.	No construction.
’024: 36	“input” (noun)	A string of one or more characters provided by a software process.	No construction.

“Input” (noun) as used in the ’024 claims means “a string of one or more characters provided by a user” with regard to the majority of the asserted claims, and “a string of one or more characters provided by a software process” with regard to claim 36. “Input” is a well-understood concept in the computer and client-server fields that refers to “data received from an external source” (*e.g.*, a user or software). *See* Ex. 7 at 524 (IEEE Dic.). With regard to the ’024 invention, there is no dispute between the parties that the relevant input data is a string of one or more characters. The surrounding claim language supports MasterObjects’ construction: for example, claims 1 and 37 recite in part “while a **user** is providing **input comprising a lengthening string of characters.**” (Emphasis added); *see also* claim 35 (“input comprising a lengthening string of characters from a user”). Similarly, claim 36 recites “...while a **software process** is providing **input comprising a lengthening string of characters.**” (Emphasis added.) Thus, the claim language itself states that the input is a string of one or more characters provided by either a user or software process (depending on the claim), and not just the changes. The server “uses the input to query data available to the

server system and send[s] return messages to the client object containing results in response to the input.” *See, e.g.*, claim 1.

The specification confirms that “input” carries its common definition: “[a]s a user inputs data into a field on a form, the auto-complete function analyzes the developing character string.” *See* ’024 patent at 6:32-35; *see also id.* at 13:28-30 (“QuestObjects input buffer (containing input from the Client)”). The dependent claims also support MasterObjects’ construction. Claim 10, for example, notes that the input is in the form of an “input string,” and that it is “the user input.” Simply put, the claimed “input” contains all of the characters entered by the user or software process. This input may then be combined with additional information to make a “query message,” discussed immediately below.

2. “Query Messages”

Claims	Claim Term	MasterObjects’ Proposed Construction	Google’s Proposed Construction
’024: 1, 6, 7, 15, 16, 18, 19, 20, 25, 28, 32, 33, 35, 36 & 37	“query messages”	Transmissions that include at least the “input.”	No construction.

“Query messages” means “transmissions that include at least the ‘input.’” When considered in tandem with the previously discussed construction of “input,” “query messages” are properly understood to include the full input string (*i.e.*, “a string of one or more characters provided by a user/software process”)—not just the changes. Indeed, this is explicit in the specification. Columns 18 and 19 show an example of how the system “capture[s] user input” and how query messages are sent between a server and a service. ’024 patent at 18:45-19:14. Starting from a point in time when the input is “a,” an “additional character event is generated when the user has typed a second character ‘b.’” *Id.* The system analyzes the string, and then “send[s] the appropriate **query message ‘ab’** to the Service.” *Id.*

at 18:67-19:2 (emphasis added). **The query message perforce includes the complete input (“ab”), not just the most recent change to the input (“b”).**

For that matter, the specification *never* uses the term “query message” to refer to a transmission of only the changes to an input string. That the query message is not limited to just the changes (“b” in the above specification example) is also perfectly consistent with the common meaning of “query” (discussed further in the next section), which is one of the root words in the phrase “query message.”

It is also clear that a “query message” may include more than just the input string—hence the “at least” language in MasterObjects’ construction. Dependent claim 18 explicitly states “the query message sent to the server system **includes a request identification.**” (Emphasis added.) Similarly, dependent claim 28 requires that the system “tests the usability of the results in the return message by matching an **ID included in one of the query messages** sent to the server system.” (Emphasis added.) Thus, a construction of “query messages” that does not permit additional information to be sent along with the input string would be impermissibly narrow and conflict with other claims of the ’024 patent.

3. “Query” and “Queries”

Claims	Claim Term	MasterObjects’ Proposed Construction	Google’s Proposed Construction
’024: 1, 6, 7, 15, 16, 18, 19, 20, 25, 28, 32 & 33	“query” / “queries” (nouns)	A string of one or more characters used to perform a search. / Strings of one or more characters used to perform searches.	No construction.

Finally, “query” and “queries” (as nouns) mean “a string of one or more characters used to perform a search” and “strings of one or more characters used to perform searches,” respectively. When used as a noun, “query” is a term that is readily understood in the art to refer to a search phrase used to request information. *See* Ex. 8 at 307 (Webster’s Computer Dic.) (“A query specifies the characteristics (criteria) used to guide the computer to the

required information.”). More specifically, with regard to the ’024 patent, it is a string of one or more characters used to perform a search. For example, the specification states that “[r]equests for information are Query objects that are sent to and interpreted by a specific Service” and that those objects “contain at least a string used by the Service as a criterion for information to be retrieved.” ’024 patent at 14:14-17.

The dependent claims support MasterObjects’ construction. For example, claim 7 deals with cached results, reciting an embodiment where the system “determines results by looking up the query in said cache so that it can avoid performing a query for the same input on a data source or looking up said query in a second cache.” Claim 20 deals with similar subject matter, and claims reusing “cached results when Previously Presented queries match queries contained in the cache.”

4. MasterObjects’ Constructions are Supported by the Remaining Claim Language and the Specification

Additional ’024 claim language fully supports MasterObjects’ constructions. For example, the construction that the query message includes the full string of characters is perfectly consistent with multiple claim terms that use “represent” and “representing.” Those claim terms include: (i) “whereby the query messages represent the lengthening string as additional characters are being input by the user/software process” (claims 1, 35, 36 and 37); (ii) “the client object, while a user/software process is providing input comprising a lengthening string of characters, sends query messages representing said input to the server system” (claims 36 and 37); and (iii) the client object “sending messages representing those Previously Presented queries to the server system” (claim 20). A representation (the noun form of “represent” and “representing” as claimed) is a “likeness, picture, drawing, block diagram, description, or symbol that logically portrays a physical, operational, or conception image or situation.” *See* Ex. 7 at 911 (IEEE Dic.). In these claims, the “query message” logically portrays the lengthening string/input (*i.e.*, the full string).

1 Additionally, claim 35 recites in part “the client object asynchronously sending
 2 **multiple query messages corresponding to multiple versions of said input** to a server
 3 system while a user modifies the input.” (Emphasis added). Applying this claim language to
 4 a simple example of a search for “patent” is helpful. As the user types, version 1 of the input
 5 is “p,” version 2 is “pa,” version 3 is “pat,” and so on and so forth. Each query message must
 6 correspond to a particular version of the input, meaning that query message 2 in this
 7 hypothetical is “pa” and query message 3 is “pat.” Accordingly, claim 35’s requirement that
 8 multiple query messages correspond to multiple versions of the input means that any
 9 construction of “query messages” – or the limitations surrounding that term – must account
 10 for the system’s ability to send full input strings rather than only the changes to a given input
 11 string. A construction otherwise would directly contradict the plain language of the claim.

12 The specification also supports the client sending the full string of characters in the
 13 input:
 14

15 The system’s protocol is not restricted to sending single characters. In fact,
 16 Clients can also use the protocol to send a string of characters.

17 ’024 patent at 12:5-6. Several portions of the specification also make clear that the system
 18 supports the server receiving strings of characters as well: “...tell the Server Quester to
 19 interpret incoming strings before they are sent to the Service as a QuestObjects Query.” ’024
 20 patent at 10:33-34, 10:46-48. These passages establish that the disclosed invention can
 21 include a client that can send the full string (rather than just the changes) and a server that
 22 can receive the full (“incoming”) string (rather than receiving only the changes to the string
 23 and then repeatedly gluing the characters together).

24 In *Google I*, both the Court and Google relied on the first paragraph in column 20.
 25 That paragraph, which further describes the preferred embodiment (to which the claims are
 26 not limited, *see Phillips*, 415 F.3d at 1323), discloses the client “send[ing] the new input
 27 buffer to the [server], so that a new query can be executed.” ’024 patent at 20:11-14. The
 28 next sentence provides an **example** of **one** way to do this: “the protocol of the present

invention provides a number of messages that allow the Client Questor to send just the changes to the input buffer, instead of sending the entire input buffer.” *Id.* at 20:14-17. But while the protocol “allows” this methodology, it does not **require** that particular method of transmission to the exclusion of **other ways**. Indeed, there is nothing in the specification that states the protocol **prohibits** the client from sending anything but the changes. To the contrary, the specification language in columns 10 and 12 quoted above shows that the client can also send the full string every time it is lengthened. Moreover, only asserted claims 32 and 33 require a “protocol” – all other asserted claims do not mention or require a protocol.

b. Google’s Proposed “Construction” is Inconsistent with the Claim Language and Specification

The three terms proposed by MasterObjects for construction are straightforward and will resolve the parties’ central dispute. Google, however, proposes that this Court construe five “terms” containing roughly 40-60 different words each.

1. Google Proposes an Identical “Construction” for a Number of Claims with Differing Claim Language

Google cannot muster a serious attack on MasterObjects’ straightforward constructions – this is evident from Google’s refusal to offer competing constructions for MasterObjects’ terms. As a result, Google proposes a single “construction” for a variety of lengthy terms without regard to their actual words. *See* Dkt. No. 36-1 at 2-15 (Exhibit A to Joint Claim Construction Statement). The words of these claims differ, and Google’s singular “construction” glosses over these differences by asking the Court to hold that each of these different claims carry an implicit limitation that is not present in the claim language itself.

Further, as also shown *supra* in Sections III, IV and VI, Google’s singular construction ignores claim language that militates against the extra limitation urged by Google. In fact, Google has gone so far as to excise claim language that is fatal to its construction. Take, for example, claim 35 discussed above on page 12. Google’s Local

Patent Rule 4-1 disclosures contained the claim limitations that Google proposed that the Court construe, including:

35 a client object adapted to receive input comprising a lengthening string of characters from a user, the client object asynchronously sending multiple query messages corresponding to multiple versions of said input to a server system while a user modifies the input, comprising a lengthening string of characters, the client object receiving return messages with results in response to the multiple versions of the input;

See Ex. 9 at 2 (Google's 4-1 Disclosures).

Google later (not so) artfully abbreviated its Local Patent Rule 4-2 disclosures to omit claim language that clearly contradicts the construction it advocates:

35 a client object adapted to receive input comprising a lengthening string of characters from a user, . . . comprising a lengthening string of characters, . . . whereby the query messages represent the lengthening string as additional characters are being input by the user;

Google excises claim language contrary to its position

See Ex. 10 at 5 (Google's 4-2 Disclosures); see also Dkt. No. 36-1 at 7-8 (Exhibit A to Joint Claim Construction Statement.).

1 The following redline shows the language that Google felt the need to omit:

2 a client object adapted to receive input comprising a lengthening string
 3 of characters from a user, ~~the client object asynchronously sending~~
 4 ~~multiple query messages corresponding to multiple versions of said~~
 5 ~~input to a server system while a user modifies the input~~, comprising a
 lengthening string of characters, the client object receiving return
 messages with results in response to the multiple versions of the input;

6 As shown on page 15's discussion of claim 35, the deleted language directly contradicts
 7 Google's construction. Google's ellipsis reveal its sleight of hand in asking this Court to
 8 impose an identical "construction" on every claim, regardless of the differences between the
 9 claims themselves and explicit contradictory claim language.

10 2. Google's Proposed "Construction" is Based on Old Claim Language

11 Google's singular construction is "each query message consists of only the changes to
 12 the input string that were not sent in any previous consecutive query." This construction
 13 blindly mimics the Court's holding in *Google I*. But as discussed extensively above, that
 14 holding was based on drastically different claim language that was omitted from the '024
 15 claims. *See supra* at Section III. Indeed, Google's previously relied upon "key claim
 16 language" (namely, "form" and "to form") is gone. Yet Google ignores these omissions.

17 Google also ignores that the claims of the '024 patent lack the claim language relied
 18 upon by the Court in *Google I*. *See supra* at Section III. There, the Court blessed Google's
 19 original argument, finding that "the claim language itself suggests that the 'lengthening
 20 string' is formed by piecing together multiple smaller queries, rather than by receiving
 21 iteratively longer versions of the string." *Google I*, Dkt. No. 153 at 16-17. The Court
 22 emphasized various '529 and '639 claim language, including "form," "consecutive,"
 23 "lengthens," and "modify," finding that those terms "suggest the server is not wiping its slate
 24 clean with each new submitted query, but is instead combining the queries to form the
 25 'lengthening string.'" *Id.* at 17; *see also Google I*, Dkt. No. 173 at 4. None of this language
 26 appears in the '024 claims.
 27
 28

1 3. *By Ignoring the Differences in Claim Language, Google’s Position*
 2 *Conflicts with Well-Settled Case Law*

3 It is axiomatic that “the claim construction inquiry . . . begins and ends in all cases
 4 with the actual words of the claim.” *Renishaw*, 158 F.3d at 1248 (citations omitted). As
 5 detailed above, Google asks this Court to ignore not only the differences between the ’024
 6 claims themselves, but also the glaring differences between the claims at issue here and those
 7 in *Google I*. But where claims use different language – as they do here – they “are presumed
 8 to have different meanings.” *Board of Regents of the Univ. of Texas Sys. v. BENQ Am. Corp.*,
 9 533 F.3d 1362, 1371 (Fed. Cir. 2008). This case presents an entirely new set of claims that
 10 differ from the claims in *Google I* in several key ways. *See supra* at Section III. Google
 11 provides no reason for the Court to deviate from well-settled principles of law and ignores
 12 the drastically different claim language presented here.

13 4. *Google’s Proposed Construction Excludes the Only “Query*
 14 *Messages” Described in the Specification and Conflicts with the*
 15 *Claim Language*

16 The language of each claim is clear: the transmissions in question are the “query
 17 messages.” *See, e.g.*, claim 1 (“the client object that, while a user is providing input
 18 comprising a lengthening string of characters, sends query messages to the server system”).
 19 As shown above, the ’024 patent specification **only** uses the term “query messages” in the
 20 context of sending the complete input string (“ab”)—not just the changes (“b”). *See supra* at
 21 Section VI(a)(2); ’024 patent at 18:45-19:14. Accordingly, the “construction” advocated by
 22 Google is inconsistent with the specification’s only use of “query messages,” thus excluding
 23 the embodiment Google itself relies upon.

24 Likewise, as shown, Google’s construction is blatantly inconsistent with the clear and
 25 plain meaning of the claim language that supports transmitting the entire string. *See supra* at
 26 Section VI. It is also clear that Google’s construction is wrong because the dependent claims
 27 (*e.g.*, claims 18 and 28) plainly state that the “query message” may include more than just the
 28 input string of characters. *See supra* at Section VI(a)(2). Thus, a construction of “query

messages” (like Google’s) that does not permit sending additional information beyond the changes to the input string would be impermissibly narrow and conflict with the ’024 claim language.

VII. Conclusion

For all the foregoing reasons, MasterObjects respectfully requests that its proposed constructions be adopted by the Court and that Google’s proposals be rejected.

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